



PLANNING ACTIONS FOR COLON AND RECTAL CANCER CONTROL: THE CONTRIBUTION OF POPULATION-BASED CANCER REGISTRIES (PBCR) IN BRAZILIAN CITIES - FORTALEZA AND PORTO ALEGRE.

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INTRODUCTION

Colorectal cancer is the third most common cause of cancer worldwide in both sexes and the second cause in developed countries. Data on the incidence of cancer are obtained from Population-Based Cancer Registries (PBCRs).

OBJECTIVE

To describe the distribution of colon-rectal cancer incidence rate in Fortaleza and Porto Alegre cities, the temporal trend of the disease between 1990-1999 and to evaluate quality of Population-Based Cancer Registries (PBCR) data.

METHODS

For this study, the data from colon-rectal cancer incidence are obtained from PBCR in Fortaleza and Porto Alegre cities. These PBCR were selected because of experience of their PBCR teams, available data for the same period (1990-1999) and both PBCR use the SisBasepop (cancer registration software developed by an expert team from National Cancer Institute of Brazil to guarantee the standardization, to linkage database and to make data comparison). Moreover, these two cities have well-differentiated behavioral profiles in considering social, economic, demographic, cultural and dietary variables. Age-adjusted annual mean incidence rates and the Estimated Annual Percent Change (EAPC) were calculated for the period since 1990 to 1999, and separated by sex. For Quality Data Indices it were compared with IARC patterns and international PBCR published in CI5 - vol.VIII.

RESULTS

The global quality indices show, in Porto Alegre PBCR, has reasonable indices to %HV (73,9% for males - 74,3% for females), higher indices from % DCO (19,5% for males - 19,3 for females) and acceptable indices M/I ratios (around 40,4% for males - 43,6% for females). In Fortaleza PBCR the global indices of data quality all of them has acceptable cancer indices to %HV (70,7% for males - 77,5% for females), % DCO (23,6% for males - 14,9 for females) and M/I ratios (60,4% for males - 43,0% for females).

The EAPC for males showed a trend towards an increase in both cities. It was observed an increase in Porto Alegre (+4.2%), but statistically no significant; however in Fortaleza it was observed a significantly highly positive increment (+9.3%). For females, a trend towards increase was also noted in Porto Alegre (+4.6%) and Fortaleza (+5.3%), but was not significant. The highest incidence rates of colon-rectal cancer were found in Porto Alegre for both sexes. The age-adjusted incidence rates in Porto Alegre were almost three times the ones in Fortaleza, for men (25.1 vs 8.6 /100,000) as well as for women (19.9 vs 7.1 /100,000), respectively. The two cities showed a trend towards an increase in the incidence rates between 1990 and 1999.

Indices of Data Quality*

PBCR	% Histological Verification		% Death Certificate Only		% Mortality/ Incidence Ratio	
	Male	Female	Male	Female	Male	Female
Fortaleza (1995-1999)	70.7	77.5	23.6	14.9	60.4	43.0
Porto Alegre (1998-2002)	73.9	74.3	19.5	19.3	43.6	40.4

*At least three years of information
Sources: MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Average age-adjusted incidence rates* and confidence interval for colorectal cancer by sex, Fortaleza and Porto Alegre, 1990-1999.

Cities	Men (CI - 95%)	Women (CI - 95%)
Fortaleza	8.6 (7.8 - 9.4)	7.1 (6.5 - 7.7)
Porto Alegre	25.1 (23.7 - 26.5)	19.9 (19.9 - 20.9)

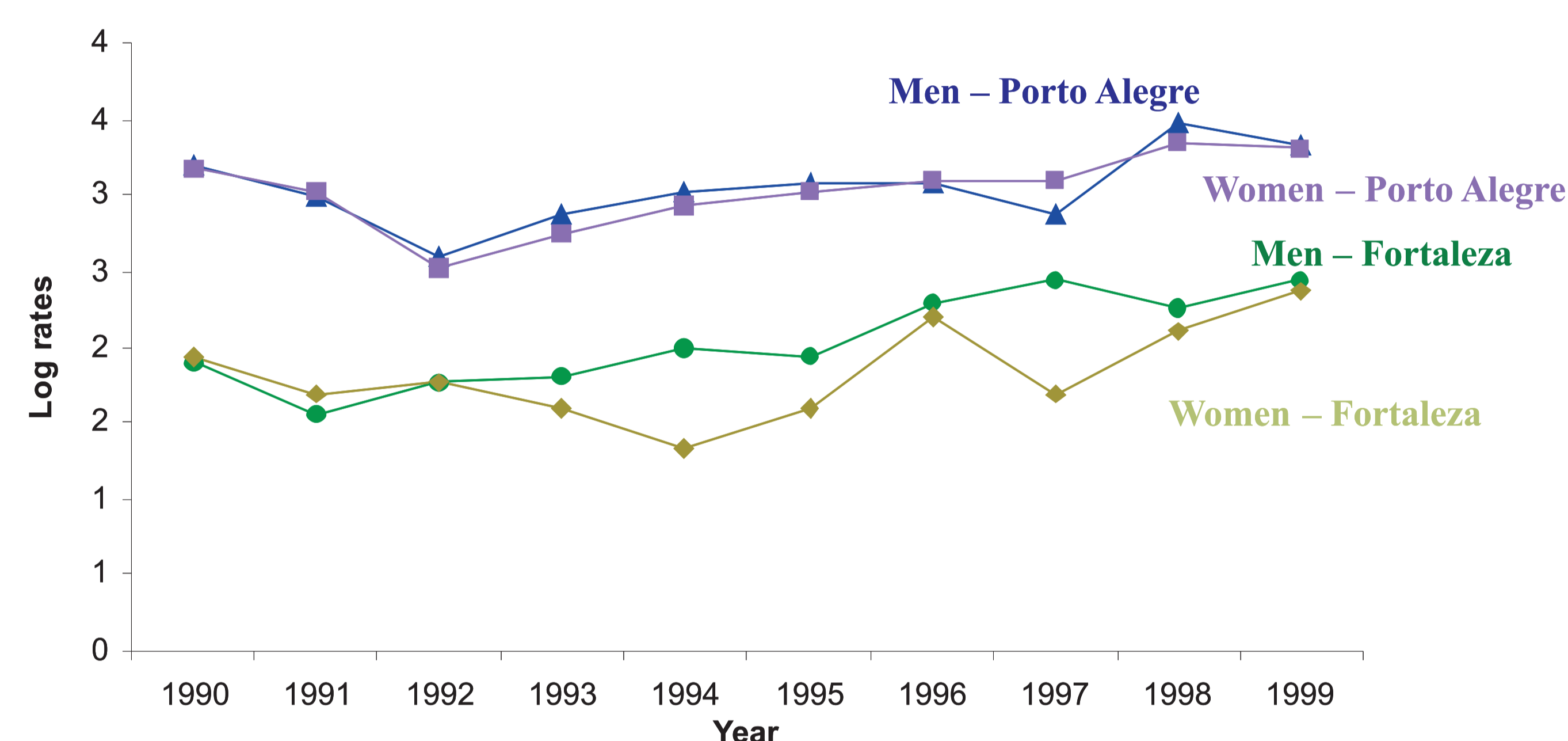
*World Standard Population
Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Estimated Annual Percent Change - EAPC of the average rates of incidence of the colorectal cancer and in Porto Alegre and Fortaleza, for both sexes, 1990 - 1999.

Age group	Fortaleza		Porto Alegre		
	EAPC	p-value	EAPC	p-value	
0 - 59 years	Men	5.07	0.188	5.47	0.110
	Women	6.13	0.076	4.34	0.173
Older than 60 years	Men	10.42	0.001	3.60	0.207
	Women	5.00	0.345	4.66	0.129
Total	Men	9.29	< 0.001	4.21	0.141
	Women	5.27	0.147	4.63	0.106

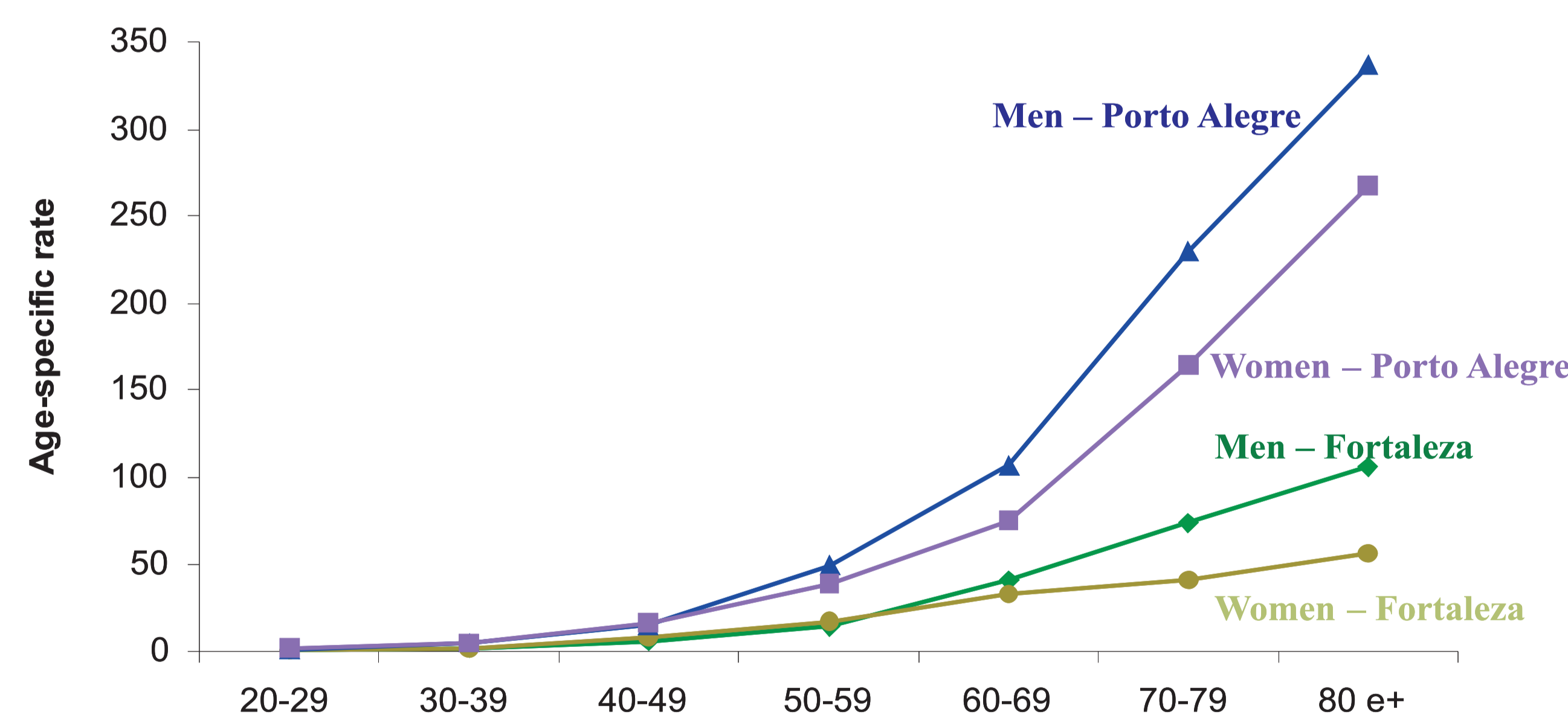
Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Average age-adjusted incidence log rates* for colorectal cancer by sex, Fortaleza and Porto Alegre, 1990-1999



*World Standard Population
Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

Average age-specific incidence rates* for colorectal cancer by sex, Fortaleza and Porto Alegre, 1990-1999



*Per 100,000 inhabitants
Sources: MP/Brazilian Institute of Geography and Statistics Foundation - IBGE
MS/INCA/Conprev/ Information Department
PBCR of Fortaleza and Porto Alegre

CONCLUSIONS

From the quality index about % DCO, it suggests how the Porto Alegre and Fortaleza PBCR are both dependent from mortality data system.

A trend towards an increase in the incidence of colon-rectal cancer is similar to other national and international findings that have also shown. This increase may be a result of strategies of early cancer detection, changes in people's lifestyles or the age structure of the population. It shows, therefore, the potential of cancer registries to identify and evaluate strategies for preventive actions and control of cancer, emphasizing its relevance within the National Plan for the Control of Cancer.

Projeto Gráfico: Seção de Multimídias / DDC / CEDC / INCA